Solvency II

Integrating the financial and non-financial aspects

Presented by
Andrew Kay

March 26, 2010

Milliman

Agenda

Pillar 1

What are the financials telling you?

Pillar 2

Governance and organisation

Risk Management System

Own Risk and Solvency Assessment (ORSA)

Supervisory review process (SRP)

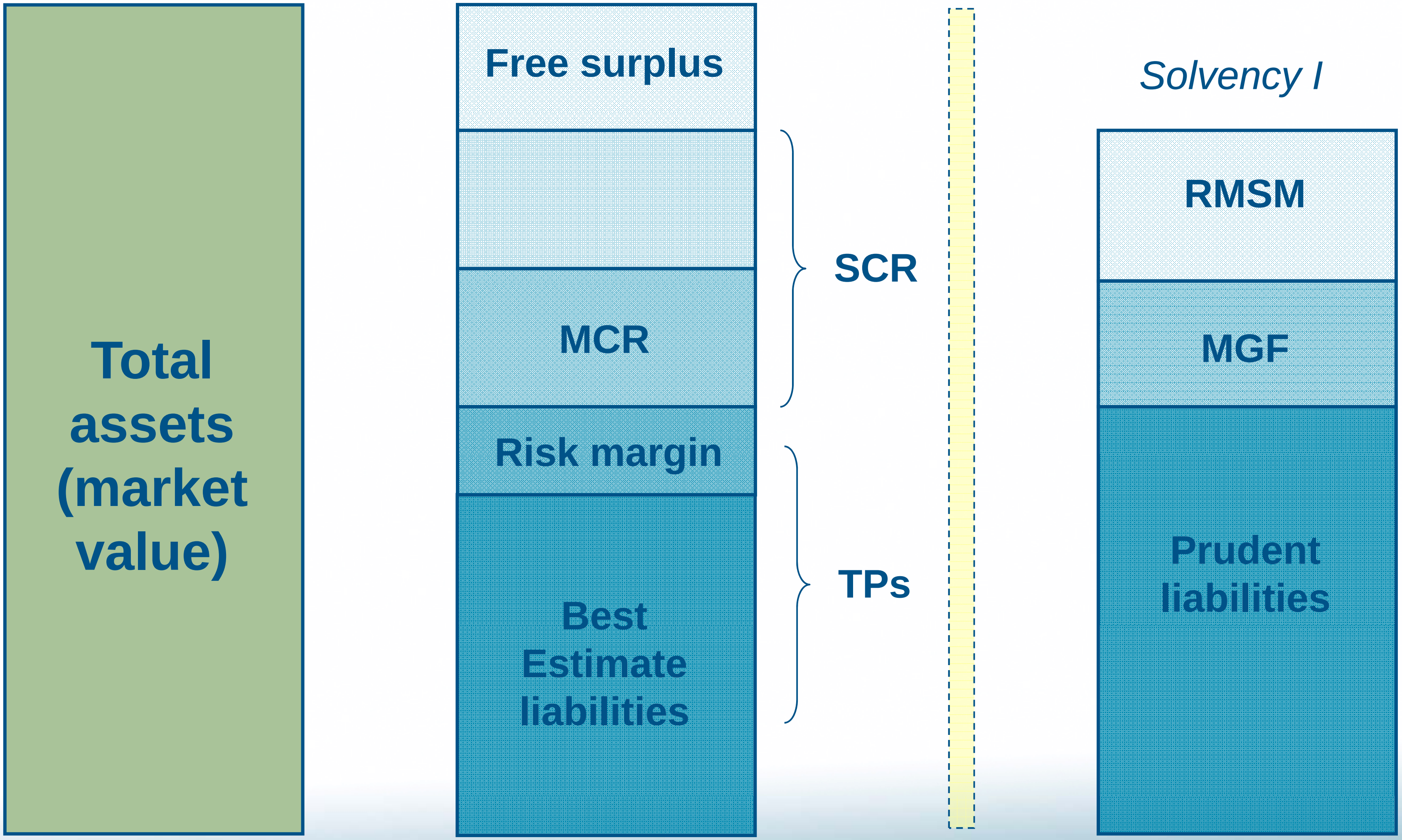
Pillar 3

Regulatory reporting

- Solvency and Financial Condition Report (SFCR)
- Report to Supervisor (RTS)

Pillar 1

What are the financials telling you?



Milliman

Pillar 1

What are the financials telling you? (2)

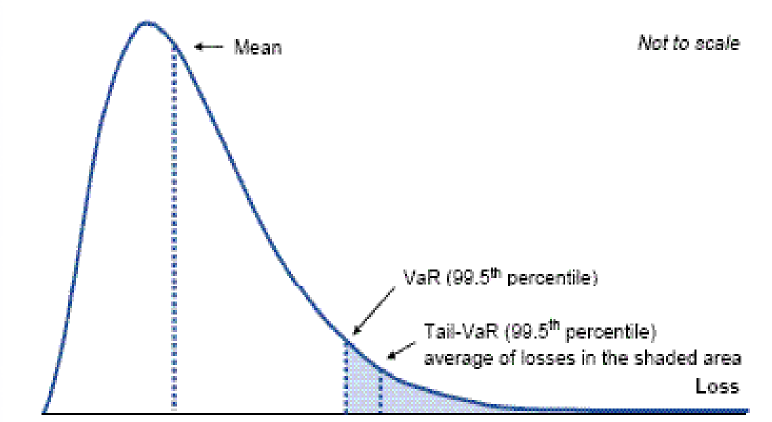
- Technical Provisions
  – Best estimate of liabilities
  – Risk margin (cost of capital)

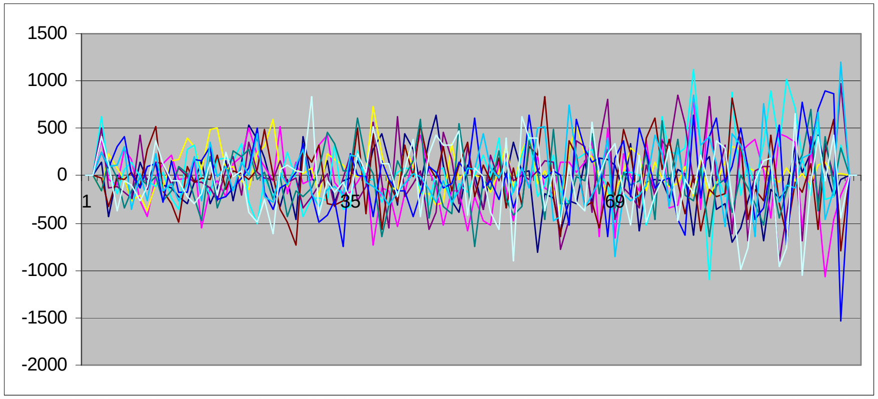
- Solvency Capital Requirement
  – Sufficient capital to cover a 1 in 200 event over the next 12 months
  – Can still meet liabilities over the next 12 months with a probability of 99.5% (VAR)

- Minimum Capital Requirement
  – Sufficient capital to cover a 30 in 200 event over the next 12 months
  – Can still meet liabilities over the next 12 months with a probability of 85%

Pillar 1

What are the financials telling you? (3)





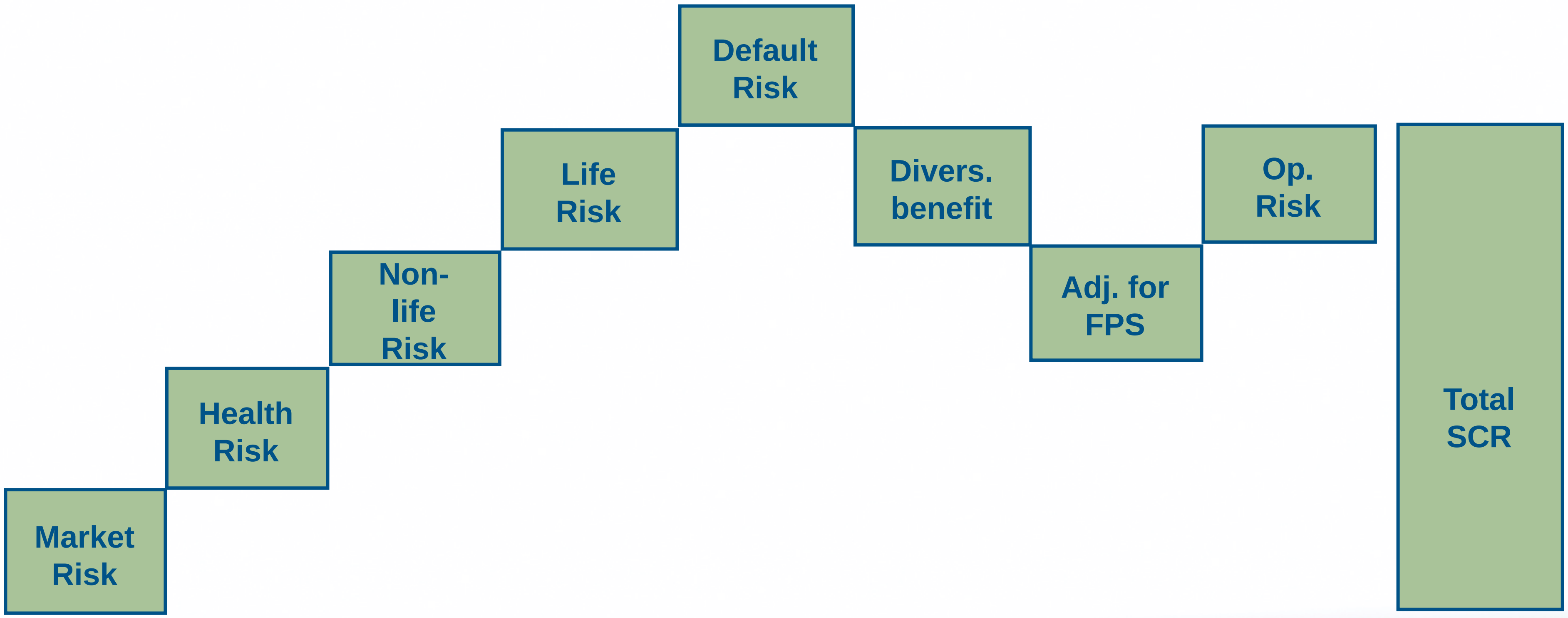
CorrSCR=	SCR_{mkt}	SCR_{def}	SCR_{life}	SCR_{health}	SCR_{nl}
SCR_{mkt}	1				
SCR_{def}	0.25	1			
SCR_{life}	0.25	0.25	1		
SCR_{health}	0.25	0.25	0.25	1	
SCR_{nl}	0.25	0.5	0	0	1

Milliman

Pillar 1

What are the financials telling you? (4)

- Components of the SCR

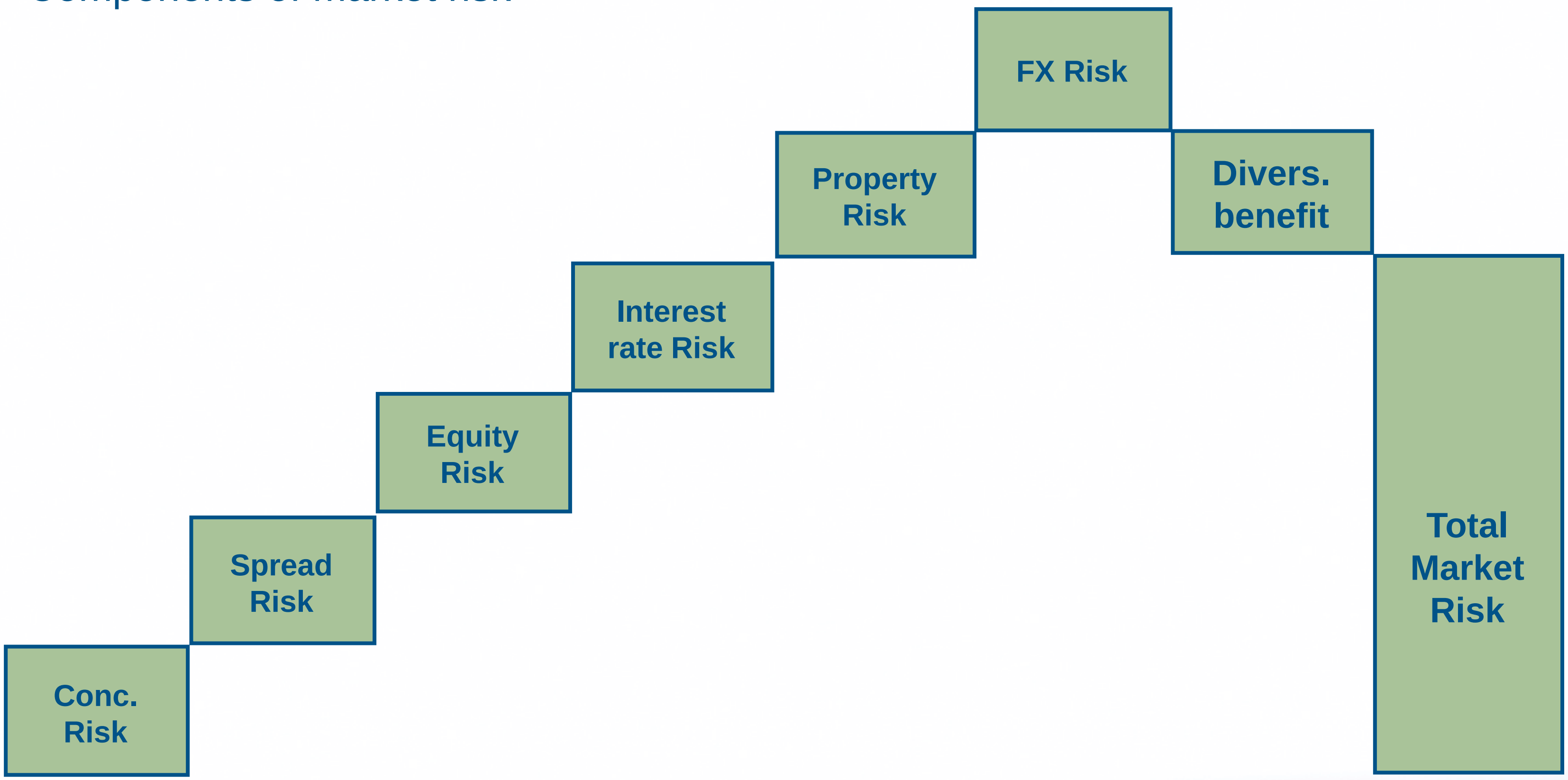


Milliman

Pillar 1

What are the financials telling you? (5)

- Components of market risk



Milliman

Agenda

Pillar 1

What are the financials telling you?

Pillar 2

Governance and organisation

Risk Management System

Own Risk and Solvency Assessment (ORSA)

Supervisory review process (SRP)

Pillar 3

Regulatory reporting

- Solvency and Financial Condition Report (SFCR)
- Report to Supervisor (RTS)

Pillar 2

Governance and organisation

- (Re)insurance companies must establish a robust system of governance with a clear, well defined organisational structure…
- There are 6 fundamental requirements, including 4 which are key functions:

Risk management
- Risk management system
- Risk management function

Actuarial function
- Calculation of technical provisions
- Opinion on the level of reserves, underwriting policy and reinsurance
- Help to put in place a risk management system

Internal audit
- Independent function for the validation of the effectiveness and adequacy of the internal control system and other elements of the system of governance

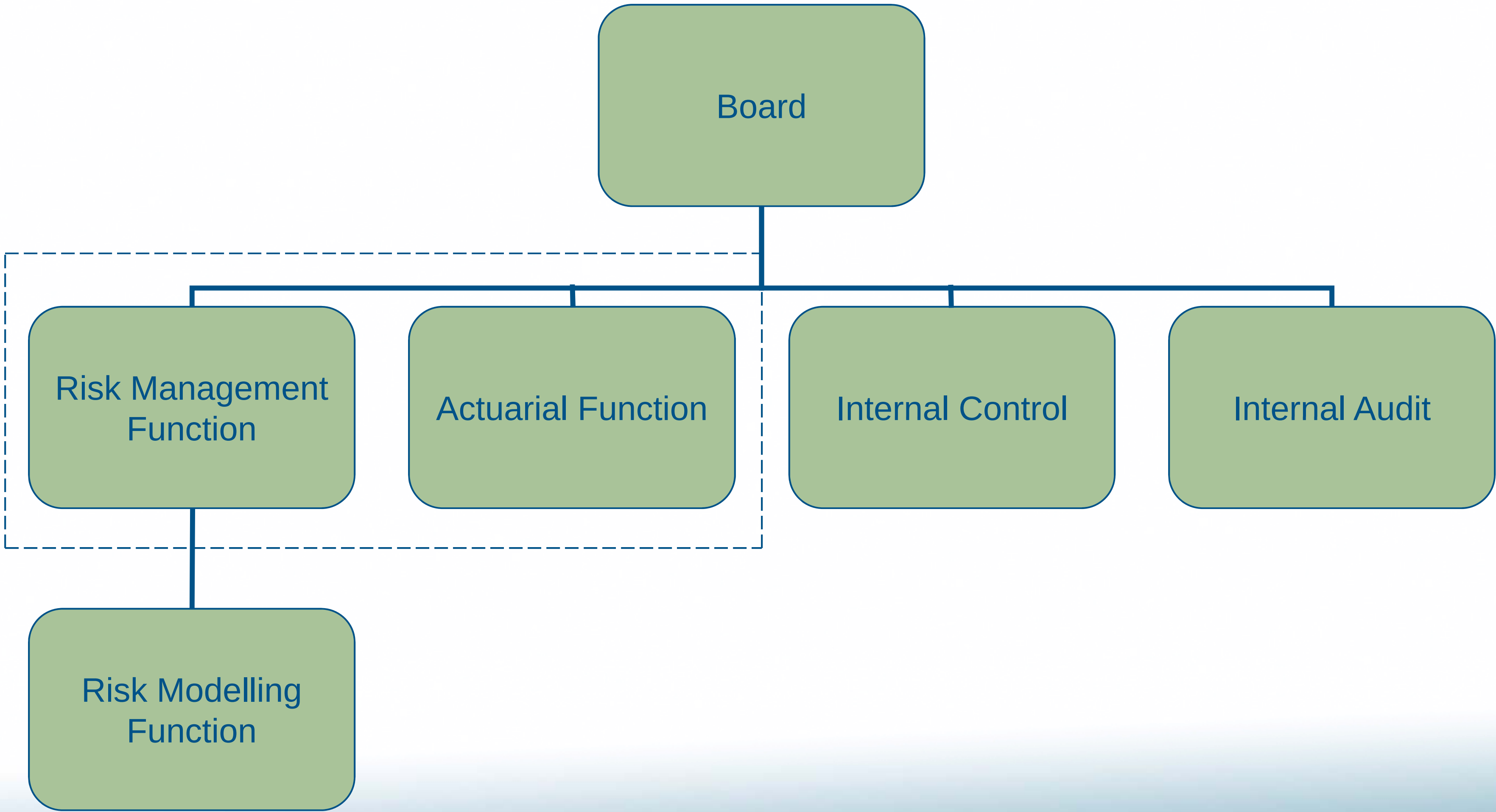
Internal control
- Internal control system
- Compliance function

Fitness and Probity
- Fitness requirements : qualifications, knowledge and professional experience
- Probity requirements : reputation and integrity of senior executives

Outsourcing
- Policy for outsourcing of important operational functions
- Required information for supervisors

Business implications

Organisational change (1)



Milliman

Business implications

Organisational change (2)

- Group internal model?
  - Consistent group wide risk management
  - Does it meet the local requirements?
  - Local governance

- Centralised risk management
  - Responsibilities still with the local board!

Milliman

Agenda

Pillar 1

What are the financials telling you?

Pillar 2

Governance and organisation

Risk Management System

Own Risk and Solvency Assessment (ORSA)

Supervisory review process (SRP)

Pillar 3

Regulatory reporting

- Solvency and Financial Condition Report (SFCR)
- Report to Supervisor (RTS)

Pillar 2

Risk Management System

A clear and documented risk management strategy

- Objectives, Key principles, Defined risk appetite, Clear allocation of responsibility

Appropriate management arrangements

- Define and categorise risks, Implement risk strategy, Facilitate controls

Adequate processes and procedures to:

- Identify, Evaluate, Manage, Monitor and report

Appropriate reporting process *(feedback loop)*

Adequate process of internal evaluation of risk and solvency (ORSA)

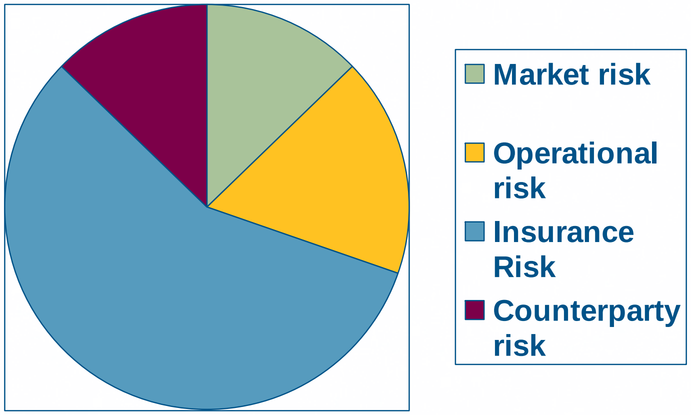
Risk Management function

Business implications

Risk Management System (1)

- Assessing the risk profile
  - Which risks?
    - Market, Insurance, Operational, Liquidity, Reputational…
  - QIS exercises
  - ORSA process

- Defining the risk appetite
  - Which risks does the company want to carry?
  - How much of these risks?
  - Which risks does the company not want to run?
  - How to measure?



Business implications

Risk Management System (2)

- Required policies
  - Underwriting and reserving
  - Asset-liability management
  - Investments and derivatives
  - Operational …

- Policies should include:
  - Risk definition
  - Goals and risk appetite
  - Process to identify, assess, monitor, manage and report
  - Limits
  - Responsibilities

Business implications

Risk Management System (3)

- Example: Market Risk

- Definition: *Risk of loss arising from movements in the level and volatility of assets, liabilities and financial instruments*

- Appetite: *Maximum amount of capital at risk is €X million over a 1 year time period with 99.5% confidence*

- Risk identification: *e.g. equity, property, interest rate, foreign exchange*

- Assessment
  - Quantitative and qualitative
  - Consider assets and liabilities

Milliman

Business implications

Risk Management System (4)

- Management/mitigation
  - Accept, reduce, avoid or share
  - Limits e.g. credit rating, geographical, derivatives, liquidity, exposure
  - Asset-Liability matching
- Monitoring
  - Performance
  - Controls and risk indicators
  - Frequency?
- Reporting
  - To Board and/or Risk Committee
  - Frequency, format?

Agenda

Pillar 1

What are the financials telling you?

Pillar 2

Governance and organisation

Risk Management System

Own Risk and Solvency Assessment (ORSA)

Supervisory review process (SRP)

Pillar 3

Regulatory reporting

- Solvency and Financial Condition Report (SFCR)
- Report to Supervisor (RTS)

Pillar 2

Own Risk and Solvency Assessment (ORSA)

- ORSA required at least annually

- Must be reviewed and approved by Board

- Will form key part of Supervisory Review Process (SRP)

Standard formula might not reflect the risk profile or solvency needs

Should at least:

- Determine overall solvency needs allowing for risk profile, limits and business strategy

- Demonstrate compliance with capital requirements, on a continuous basis

- Report on extent to which risk profile differs from assumptions underlying capital calculations

ORSA

ORSA is the entirety of processes and procedures used to:

- Identify, assess, monitor, manage and report the short and long-term risks

- Determine own funds necessary to ensure that the solvency needs are met at all times

Milliman

Business implications

ORSA

- Internal capital may be different to SCR
  – Different confidence level
  – Risk profile different to assumptions underlying SCR e.g. non-standard assets or liabilities
  – Time horizon might differ

- ORSA might use different capital measure or time horizon but also required to calculate 99.5% one-year VAR

- If ORSA produces different capital requirement to SCR
  – Explain the reasons and identify the impact
  – Higher capital might not mean capital add-on
  – Lower capital will not result in capital release

→ Develop internal model?

Pillar 2

Supervisory Review process (SRP)

- Supervisor will review and evaluate
  - System of governance
  - Technical provisions
  - Capital requirements
  - Investment rules
  - Quality and quantity of own funds
  - Model requirements

- ORSA forms key part of review

- Assessment of:
  - Qualitative requirements
  - Risks which the undertaking faces
  - Ability of the undertaking to assess those risks

- Will establish minimum frequency and scope of reviews, evaluations and assessments

- May in exceptional circumstances set a capital add-on

Agenda

Pillar 1

What are the financials telling you?

Pillar 2

Governance and organisation

Risk Management System

Own Risk and Solvency Assessment (ORSA)

Supervisory Review Process (SRP)

Pillar 3

Regulatory reporting

- **Solvency and Financial Condition Report (SFCR)**
- **Report to Supervisor (RTS)**

Pillar 3

Regulatory reporting

Outline SFCR and RTS	
Business and performance	•A.1 Business and external environment •A1a Objectives and Strategies (RTS only) •A.2 Performance of underwriting activities •A.3 Performance of Investments •A.4 Operating costs / other •A.5 Other published
Systems of governance	•B.1 General requirements of governance •B.2 Fitness and probity •B.3 Risk Management •B.4 ORSA • …
Risk Management	•C.1 Risk Underwriting •C.2 Market Risk •C.3 Credit Risk •C.4 Liquidity Risk •C.5 ALM •C.6 Operational Risk • …
Balance Sheet Solvency II	•D.1 Assets •D.2 Technical provisions •D.3 Other liabilities
Capital Management	•E.1 Equity •E.2 Regulatory Capital Requirements (MCR and SCR) •E.5 Non-compliance with MCR and SCR

The SFCR and RTS differ:

- Their level of detail required
- The objectives and strategies are made available within the RTS

They both will be supplemented by a quantitative reporting template. Further Level 3 guidance to be provided on this.

Milliman

Pillar 3

Regulatory reporting (2)

	SFCR	RTS	Quantitative Reporting (included with the SFCR and RTS)
Frequency	Annual	Annual for companies subject to detailed assessment under the SRP	Quarterly and Annual
Date Submitted	In 14 weeks after the close of the financial year	In 14 weeks after the close of the financial year	Within 4 weeks following the quarterly close For annual reporting submitted within 14 weeks after the close of the financial year
Format	Common structure developed by CEIOPS	Common structure developed by CEIOPS	Common structure developed by CEIOPS
Internal validation by the Board	Yes	Yes	Yes

Milliman

Other business implications

- Solvency II implications for different product lines
  - Positive for pure unit-linked?
  - Bad news for annuity providers?
  - Impact on non-life?
- Reinsurance
  - Treated as an asset
  - Explicit recognition of counterparty risk → collateral
  - Possible benefit to large reinsurers using internal models
- Other
  - increased capital needs → increased consolidation?
  - Competitive advantage for well diversified companies?
  - Systems and data challenges
  - Significant cost of preparation

Milliman

Summary

- Pillar 1
  - Risk-based approach
  - More detail/complexity but better reflection of risk profile
- Pillar 2
  - Organisational changes
  - Risk management
  - ORSA
- Pillar 3
- Need to commence preparation for all aspects of Solvency II
  - Gap analysis for all Pillars
  - QIS 5
  - Internal models (if relevant)